

**Proposed  
Environmental Cooperative Agreement  
between  
Wisconsin Electric Power Company  
and  
Wisconsin Department of Natural Resources**

This agreement is being entered into, pursuant to sec. 299.80 Wisconsin Statutes and represents the negotiated and agreed to conditions agreed upon by Wisconsin Department of Natural Resources (WDNR) and Wisconsin Electric Power Company (the Company), for the purpose of providing an alternative method for the regulation of environmental impacts from Wisconsin Electric Power Company's Pleasant Prairie Power Plant.

FOR AND IN CONSIDERATION of the terms and conditions contained in this agreement, WDNR and the Company set forth the following:

**I. FACILITY INFORMATION:**

Pleasant Prairie Power Plant  
8000 95<sup>th</sup> Street  
Pleasant Prairie, WI 53158

**Contact:**

Mr. Stephen "Steve" Downs, Plant Manager  
(414) 947-5321  
(414) 947-5608 fax  
Steve.Downs@wepco.com  
Web Page: [www.wepco.com](http://www.wepco.com)

The Pleasant Prairie Power Plant is the largest electric generating plant in Wisconsin. The facility occupies approximately 425 acres of land in the Town of Pleasant Prairie, five miles west of Lake Michigan in Kenosha County. The plant consists of two 580 MW units, each consisting of a boiler, turbine and electric generator. It is Wisconsin Electric's main baseload plant, operating 24 hours per day throughout the year with the exception of maintenance outages that are typically scheduled once every 12 to 24 months.

The plant burns low-sulfur pulverized coal delivered to the plant from the Powder River Basin in Wyoming via unit trains. At maximum load the plant may burn 800 tons of coal per hour. Coal delivered to the plant is stored in an outdoor coal pile having a maximum capacity of 1.4 million tons. The plant also uses natural gas and No. 2 fuel oil during initial start-up of the boilers when they have been out of service and as a supplemental fuel.

Exhaust gases from the boilers are routed through electrostatic precipitators that remove more than 99.79 percent of the fly ash. Heavier bottom ash is collected at the base of the boiler with a separate ash system. All ash generated by the plant is used commercially. After passing through the air pollution control systems, the exhaust gases are routed to a common 450-foot stack. Emissions to the air include nitrogen oxides, particulate matter, sulfur dioxide, carbon monoxide, and volatile organic compounds.

Exhaust steam from the turbines is routed through cooling condensers before being re-injected into the boiler. To get rid of this unrecoverable heat, a maximum of 400,000 gallons of water per minute are pumped through each of the two circular cooling towers located north of the plant. Each of these mechanical draft towers is 300 feet in diameter and 75 feet tall, and contains tens of thousands of small deflectors that break up the water into very fine droplets that dissipate heat to the atmosphere. The most obvious reminder of the plant's presence (especially on a cold day) is the water vapor plume rising from the cooling towers. Makeup water for the evaporation losses is pumped from Lake Michigan at the rate of 3,000-4,000 gallons per minute for each cooling tower.

About 3.75 million gallons per day of wastewater, primarily cooling tower blowdown water, is discharged into Lake Michigan through a five-mile pipeline. The circulating cooling water system releases water (blowdown) to prevent the buildup of dissolved solids, and adds new lake water (make-up) to compensate for the blowdown and evaporative losses. Combined with the cooling tower blowdown are other wastewater sources consisting of low volume wastewater, coal pile runoff, and metal cleaning wastewater. These three wastewater sources are stored in separate retention basins and are then routed to the wastewater treatment system for solids and metals removal. In addition, there is an outfall for a deicing line for the water intake system, and an infrequently used overflow outfall for the coal pile runoff retention basin, which discharges to Jerome Creek.

## **II. DEFINITIONS.** The following definitions are applicable to this agreement:

- a. "Approval" means a permit, license or other approval issued by the department under chapters 280 to 295 Wis. Stats.
- b. "Cooperative agreement" means an agreement entered into under section 299.80(6), Wis. Stats.
- c. "Environmental management system" means an organized set of procedures implemented by the owner or operator of a facility to evaluate the environmental performance of the facility and to achieve measurable or noticeable improvements in that environmental performance through planning and changes in the facility's operations.
- d. "Environmental performance" means the effects whether regulated under chapters 280 to 295 Wis. Stats. or unregulated, of a facility on air, water, land, natural resources and human health.
- e. "Facility" means all buildings, equipment and structures located on a single parcel or on adjacent parcels that are owned or operated by the same person.
- f. "Interested person" means a person who is or may be affected by the activities at a facility that is covered or proposed to be covered by a cooperative agreement or a representative of such a person.
- g. "Performance evaluation" means a systematic, documented and objective review conducted by or on behalf of the owner or operator of the facility including an evaluation of compliance with the cooperative agreement covering the facility, approvals that are not replaced by the cooperative agreement and the provision of chapters 280 to 295 Wis. Stats. and rules promulgated under those chapters for which a variance is not granted.
- h. "Pollutant" means any of the following: any dredged spoil, solid waste, incinerator residue, sewage, garbage, refuse, oil, sewage sludge, munitions, chemical wastes, biological materials, radioactive substance, heat, wrecked or discarded equipment, rock, sand, cellar dirt, or industrial, municipal, or agricultural waste discharged into water or onto land, any dust, fumes, mist, liquid, smoke, other particulate matter, vapor, gas odorous substance or any combination of those things emitted into the air but not uncombined water vapor.
- i. "Violation" means a violation of a cooperative agreement, of an approval that is not replaced by the cooperative agreement or of a provision of chapters 280 to 295 Wis. Stats. and rules promulgated under those chapters for which a participant has not received a variance.

**III. PERIOD OF AGREEMENT.** This agreement shall commence, subject to its signing by both parties on September 29, 2000 and continue until September 29, 2005, during which period the Company and WDNR shall abide by all terms and conditions contained herein. This agreement may be renewed up to five years pursuant to s. 299.80(6e), Wis. Stats.

**IV. AMENDMENT/REVOCATION.** Pursuant to s. 299.80(7), Wis. Stats., WDNR may amend this agreement with the consent of the Company or for cause. WDNR may revoke an agreement at the request of the Company or if the Company is in substantial noncompliance, refuses to amend this agreement, is unable or unwilling to meet commitments to superior environmental performance or have not addressed a substantive issue raised by a majority of the interested persons (s. 299.80 (7), Wis. Stats). WDNR shall provide at least 30 days for public comment on the proposed amendment or revocation of a cooperative agreement and an opportunity for a hearing if comments demonstrate considerable public interest in the proposed action.

**V. ENTIRE AGREEMENT.** This agreement, together with any specifications, referenced parts, attachments and effective amendments, shall constitute the entire agreement. Communications or understandings made prior to the signing of this agreement and pertaining to its subject matter are hereby superseded. All revisions to this agreement must be made by a written amendment to this agreement, signed by both parties and issued under the same procedures as this agreement.

#### **VI. APPROVALS COVERED.**

The following permits and approvals covered by this agreement apply specifically to the Pleasant Prairie Power Plant:

Air Quality Permit (Title V Permit)	Air Pollution Control Operation Permit (Title V) WDNR Permit No. 230006260-P01 EI Facility No. 230006260
Wastewater Permit	Wisconsin Pollutant Discharge Elimination System Permit (WPDES) Wisconsin Permit No. WI-0043583-5
Stormwater Permit	Wisconsin Stormwater Permit Wisconsin Permit No. WI-0043583-3
Solid Waste Permit (Ash Landfill)	Pleasant Prairie Ash Landfill WDNR Site License No. 02786 8000 95 <sup>th</sup> Street Pleasant Prairie, WI 53158

The following permits and approvals covered by this agreement apply to other solid waste facilities owned by the Company from which stored combustion waste materials may be removed for energy recovery at Pleasant Prairie Power Plant:

Solid Waste Permit (landfill)

Caledonia Ash Landfill  
WDNR Site License #03232  
4801 E. Elm Road  
Oak Creek, WI. 53154

North Oak Creek Landfill  
WDNR Site License #00349  
Federal ID Number 241219440  
4801 E. Elm Road  
Oak Creek, WI. 53154

South Oak Creek Landfill  
WDNR Site License #02357  
4801 E. Elm Road  
Oak Creek, WI. 53154

Kansas Avenue Landfill  
St. Francis, Wisconsin  
Milwaukee County

System Control Center Ash Landfill  
WDNR Site License #02887  
N20 W23501 Ridgeview Parkway  
Pewaukee, WI 53072

Highway 32 Ash Landfill  
WDNR Site License #02801  
1866 N. Port Washington Rd.  
Grafton, WI 53024

Cedar-Sauk Landfill  
WDNR Site License #00603  
Federal ID Number 246049210  
Cedar-Sauk Road  
Town of Cedarburg  
1.5 miles west of Saukville

Highway 59 Landfill  
WDNR Site License #00918  
Federal ID Number 268153160  
Along Arcadian Avenue, east of Hwy. 164/59  
Town of Waukesha

The Company previously obtained approval from WDNR to burn a combination of pulverized coal, fly ash, and bottom ash at Pleasant Prairie Power Plant. The proposal met WDNR's Air Management program requirements for use of alternate fuels, as well as WDNR's Waste Management program requirements for beneficial reuse of high-volume industrial wastes. That approval applies only to ashes that have never been landfilled that were produced at three specific power plants owned by the Company

(Valley Power Plant, Milwaukee County Power Plant, and Port Washington Power Plant). As such, that approval is not covered by this agreement.

The Company conducted an approved pilot project in 1998 that successfully demonstrated a process for recovering ash from the landfill at Pleasant Prairie Power Plant and processing the materials for beneficial reuse in construction materials while protecting the environment. The Company also has ongoing approval to beneficially reuse the fly ash and bottom ash generated at Pleasant Prairie Power Plant for specific purposes. That approval is not modified by this agreement.

Any requirements of the permits and approvals listed above that are superseded by this Cooperative Agreement are specified in Section XI (Operational Flexibility and Variances). All other requirements of the covered permits and approvals are unchanged.

## **VII. INTERESTED PERSONS GROUP**

Interested persons that the Company either has worked with or will be requesting to work with include the following:

1. Pleasant Prairie Power Plant management staff
2. Local 2150 IBEW (plant represented staff)
3. Local 317 Operating Engineers (plant represented staff)
4. Village of Pleasant Prairie
5. Pleasant Prairie Planning Commission
6. Kenosha County
  - Office of the County Executive
  - Kenosha County Board of Supervisors
  - Environmental Health Office
7. Wisconsin Department of Natural Resources
  - Sturtevant Service Center
  - Milwaukee Regional Office
8. Kenosha Chamber of Commerce
9. Kenosha Area Development Corporation
10. Local Emergency Planning Committee (LEPC)
11. Kenosha News (local newspaper)
12. Wisconsin Environmental Initiative
13. Anthony Earl (former Governor)
14. Indian Trails School (local school)
15. Lakeshore Technical School (local school)
16. Local companies (e.g., Rust Oleum, Lawter, SuperValu)
17. Local officials from the vicinity of each landfill from which ash is actually recovered under the terms of this agreement

*[Note: The list of individuals participating on the interested persons group will be finalized prior to signing of a final Cooperative Agreement. As part of the complete application, the Company submitted supplemental documents including: 1) A list of the names of individuals invited to represent the above organizations; 2) a description of the process and criteria used to identify potential interested parties; and, 3) a description of the measures the Company has taken or will take to involve interested persons in the development and review of the Cooperative Agreement. An introductory meeting and plant tour occurred on August 2, 2000. Interested persons were invited to attend and an open invitation to the*

*public was printed in local newspapers. All supplemental documents are available from WDNR on request.]*

Assistance available from the Company to interested persons shall include but not be limited to the following:

- |                                   |  |
|-----------------------------------|--|
| Informational Meetings and Forums | <ul style="list-style-type: none"><li>• Internal informational meetings for members of Local 2150 and 317, and plant management staff</li><li>• Invited informational meetings for external members of the interested persons group</li></ul>  |
| Tours and Open Houses             | <ul style="list-style-type: none"><li>• Annual open house for employees of Local 2150 and 317 and plant management staff, along with their families and interested members of the public</li><li>• Targeted tours for external members of the interested persons group</li></ul>   |
| Mailings                          | <ul style="list-style-type: none"><li>• Summary information sheets outlining key information about the plant's operations, environmental performance, and key components of the Cooperative Agreement, including the plant's progress on specific commitments and activities within the agreement</li></ul>  |
| Wisconsin Electric Internet Site  | <ul style="list-style-type: none"><li>• Development of a specific page on the Company's Internet site dedicated to the Pleasant Prairie Power Plant and the Cooperative Agreement</li><li>• Linkage of the Company Internet site with the WDNR Cooperative Agreement Internet site</li></ul>   |
| Presentations and Visits          | <ul style="list-style-type: none"><li>• Actively soliciting and responding to invitations from external groups for presentations by plant staff on the plant's operations, environmental performance, and progress on the agreement</li></ul>  |
| Summaries to the DNR              | <ul style="list-style-type: none"><li>• Annual summaries to WDNR's District and Service Center offices on the implementation progress of, a) environmental commitments to superior environmental performance, and b) operational flexibility and variances</li><li>• Annual summaries to WDNR on the Company's progress on implementation of the Cooperative Agreement and environmental performance</li></ul> |

The Company shall meet with the interested persons group on a schedule of at least once every six months. The Company shall provide information, solicit comments, involve the interested persons group in reviewing performance under this agreement, and seek consensus over performance issues. The Company shall also provide opportunities for the interested persons group to comment on the Company's

environmental management system and its implementation. Other types of information to be addressed in these meetings may vary, but shall include one or more of the following within each update:

- Progress on the negotiation and implementation of the Cooperative Agreement
- Detailed reports on any specific commitments or flexibility aspects of the Cooperative Agreement, including opportunities and challenges
- Baseline environmental performance of the plant
- Significant findings from audits and resulting corrective actions
- Normalized emissions of the plant
- Proposed changes in plant operation to increase energy efficiency and/or environmental performance
- Administrative savings potentially realized by the Company and regulatory agencies.

## **VIII. COMMITMENT TO ENVIRONMENTAL MANAGEMENT SYSTEM.**

The Company commits to develop and document an environmental management system (EMS) meeting the requirements of ISO 14001 by September 5, 2001. A certified ISO 14000 auditor shall oversee development and maintenance of this EMS. Members of the interested persons group shall have an opportunity to comment on the EMS. Furthermore, the Company shall meet with members of the interested persons group at least once every six (6) months to discuss EMS implementation and to receive comments on progress of the project. Data on this EMS shall be collected pursuant to the data protocols developed by the University of North Carolina.

## **IX. COMMITMENT TO SUPERIOR ENVIRONMENTAL PERFORMANCE.**

The Company commits to going beyond what would otherwise be required in environmental regulations by setting the following goals:

### **Reduced Natural Resource Usage**

The Company shall combine ash recovered from landfills with coal and burn the mixture to generate electricity. One goal is to reduce coal usage by 10,000 ton/yr. A second goal is to generate 10,000 MWh/yr of electricity from recovered ash.

Measure: Tons of coal displaced by recovered ash; Megawatt-hours (MWh) of energy recovered from previously landfilled ash.

### **Reduced Waste Generation**

The Company commits to an average annual opacity goal of 10 percent during the first year of the agreement. The existing permit limitation is 20 percent.

Measure: Opacity as read by continuous emission monitors using standard methods.

### **Improved Land Use and Reduced Risk of Environmental Contamination**

The Company shall remove ash from Company-owned landfills for beneficial reuse. An eventual goal is to completely remove the ash from one or more landfills and

	<p>restore the land for more desirable uses. A second goal is to reduce risk and potential liability for groundwater contamination caused by leaching or leaking of materials from the landfills.</p> <p>Measure: Volume of landfill space made available; number of landfills decommissioned or acres of land made available for higher use.</p>
Implementation of ISO 14001-based Environmental Management System (EMS)	<p>The Company shall implement and document a plant-wide EMS at Pleasant Prairie Power Plant based on ISO 14001. This documentation shall be available to WDNR and the interested persons group.</p> <p>Measure: Percent implementation</p>
Baseline Performance Review (Audit)	<p>The Company shall perform a baseline environmental performance review (audit) and annual reviews thereafter for the duration of the agreement. Key findings and follow up actions shall be communicated to the interested persons group.</p> <p>Measure: Number of findings, corrective actions, and time periods required for corrective action.</p>
Environmental Management Information System (EMIS) Implementation	<p>The Company shall implement a plant-wide electronic environmental management information system to assist plant and corporate staff in planning, tracking, and reporting on environmental activities and performance.</p> <p>Measure: Percent implementation</p>
Supplier Environmental Management System Audits	<p>The Company shall conduct environmental management system (EMS) audits of all key suppliers that may present significant environmental aspects as part of the service they provide the plant, including but not limited to any business contracted to recover or process ash from a Company landfill. A tentative schedule for conducting these audits shall be provided by the Company to WDNR and the Interested Persons group within 60 days of the effective date of this agreement. ISO 14001 shall be used as the protocol for these audits. Feedback shall be provided back to the suppliers. The suppliers audited shall be reported to the interested persons group; however, the specific results may remain confidential between the Company and the supplier.</p> <p>Measure: List of audits conducted and qualitative and quantitative performance measures specific to the Company's contract with each supplier.</p>



Mercury Demonstration Testing

The Company shall conduct testing to determine the potential presence and form of mercury in exhaust gases at the plant.

Measure: Percent complete and results of the testing.

Continuous Particulate Matter Monitor Study

The Company shall work with multiple equipment manufacturers and EPRI in evaluating the performance of a new generation of continuous particulate matter monitors.

Measure: Percent complete and results of the study.

## X. POLLUTION LIMITS.

With the exception of those limits identified in Section XI (Operational Flexibility and Variances), the Company commits to abide by all current and future applicable environmental limits. Any provisions of permits or approvals covered by this agreement that are not specifically superseded in Section XI shall remain in effect.

## XI. OPERATIONAL FLEXIBILITY AND VARIANCES.

### A. Alternative Monitoring and Enhanced Corrective Action

The agreement allows the Company to use alternative monitoring in exchange for enhanced corrective action with respect to the following items:

Item	Previous Requirements Superseded by this Agreement <i>[source of requirement]</i>	New Requirements
Electrostatic Precipitator Monitoring and Data Collection	The permittee shall monitor and record the primary voltage, secondary voltage, primary current, secondary current, and sparking rate once every operating shift. <i>[Title V Permit #23006260-P01, Conditions I.A.1.b.(5) and I.A.1.c.(5)]</i>	The Company shall examine the electrostatic precipitator and take any necessary corrective action when:  1) the daily average opacity exceeds 10 percent; or, 2) the six-minute average opacity exceeds 17 percent. All corrective action shall be documented in the plant logs. The Company and WDNR shall evaluate and potentially adjust these levels after the first year of the agreement.
Annual Instrument Calibration	All instruments used for measuring source or air pollution control equipment operational variables	The Company shall calibrate all instruments used for measuring source or air pollution control equipment operational variables

	shall be calibrated yearly or at a frequency based on good engineering practice as established by operational history, whichever is more frequent. <i>[Title V Permit #23006260-P01, Condition II.C.13.]</i>	during major maintenance outages or following good engineering practices, but no less frequently than once every twenty-four (24) months. The Company shall keep records documenting any calibration activities. Requirements for calibrating continuous emission monitors and continuous opacity monitors are <u>not</u> superseded by this agreement.
Coal and Ash Dust Collector Data Collection	<p>The permittee shall monitor and record the pressure drop across the storage bin vent baghouse (C13), in inches of water, once per shift when the process is in operation. <i>[Title V Permit #23006260-P01, Condition I.D.1.c.(2)]</i></p> <p>The permittee shall keep records of the date of any inspections of baghouse C13 and the date any bags are replaced. <i>[Title V Permit #23006260-P01, Condition I.D.1.c.(3)]</i></p> <p>The permittee shall keep records of the date of any inspections of the in-plant coal transfer baghouse (C14) or the coal crusher house baghouse (C16) and a description of any maintenance or repairs performed as a result of the inspection and alarms. <i>[Title V Permit #23006260-P01, Conditions I.E.1.c.(2)(b) and (c) and I.F.1.c.(2)(b) and (c)]</i></p>	<p>The Company shall:</p> <ol style="list-style-type: none"> <li>1) inspect the storage bin vent baghouse (C13), the in-plant coal transfer operations baghouse (C14), and the coal crusher house baghouse (C16) daily; and,</li> <li>2) keep records of any necessary corrective actions taken as a result of the inspections of baghouse C13, C14, or C16 or control room alarms.</li> </ol>
Fugitive Dust Monitoring Recordkeeping	The permittee shall maintain records that describe the precautions taken to prevent particulate matter from becoming airborne and the dates on which the precautions were taken. <i>[Title V Permit #23006260-P01, Condition I.C.1.c.(1)]</i>	The Company shall conduct shift and routine operational inspections of the coal pile and other fugitive dust sources, ensuring that good operating practices and enhanced dust control techniques are practiced.

## B. Reduced Reporting and Decreased Administrative Expense

The agreement allows the Company to reduce reporting and realize reduced administrative expenses both for itself and the regulatory agencies through implementation of the following items:

Item	Previous Requirements Superseded by this Agreement <i>[source of requirement]</i>	New Requirements
Continuous Emission Monitor (CEM) Data Submittal	The permittee shall submit certified quarterly reports of CEM data and information to the United States Environmental Protection Agency (EPA). Each report and certification must be submitted to EPA within 30 days following the end of each calendar quarter. <i>[Title V Permit #23006260-P01, Acid Rain Portion, Requirement 3.f.(2) and Code of Federal Regulations, 40 CFR 75.64.]</i>	The Company shall:  1) submit certified semi-annual CEM data summaries to EPA no later than August 1 and February 1 of each year; and, 2) notify WDNR within five business days whenever CEM monitor availability drops below 98 percent for a given calendar month, and take corrective or maintenance action as necessary.
Quarterly Excess Emission Reporting	Quarterly excess emission reports for visible emissions, sulfur dioxide, and nitrogen oxides from boilers B20 and B21 shall be submitted within 30 days following the end of each calendar quarter. <i>[Title V Permit #23006260-P01, Conditions I.A.2.c.(3), I.A.3.c.(3), I.A.4.c.(3), and I.G.1.a.(1) and (2)]</i>	The Company shall:  1) notify WDNR within one business day of excess emissions, followed by an electronic mail notification within five business days; and, 2) submit an annual excess emission summary report for boilers B20 and B21 for each calendar year, concurrent with the annual Title V certification report (see next item below).
Title V Semi-Annual and Annual Reports	<ol style="list-style-type: none"> <li>1) The permittee shall submit the results of monitoring, or a summary of monitoring results, required by this permit to the Department every 6 months.</li> <li>2) The time periods to be addressed by the submittal are January 1 to June 30 and July 1 to December 31.</li> <li>3) The report shall be submitted to Southeast Region within 30 days after the end of each reporting period.</li> <li>4) All deviations from, and violations of, applicable requirements shall be clearly identified in the submittal.</li> <li>5) Each submittal shall be</li> </ol>	The Company shall submit to WDNR:  1) a written semi-annual monitoring report covering the time period January 1 to June 30 of each year within 30 days after the end of each reporting period. This report may be submitted by electronic mail at the Company's discretion. This report shall be signed or electronically signed by a responsible official of the Company. The report shall list the dates of any reported deviations from or violations to applicable requirements, and include the following statement: "All deviations from, and violations of, applicable requirements for Pleasant Prairie Power Plant were reported to WDNR within one business day of their discovery by the Company. I certify that

	<p>certified by a responsible official as to the truth, accuracy and completeness of the report.</p> <p><i>[Title V Permit #23006260-P01, Conditions I.G.4.b.a.(1) - (5)]</i></p>	<p>this information is true, accurate and complete.”</p> <p>2) A written annual monitoring report that meets the requirements specified in conditions I.G.4.b.a.(3), (4), and (5) of the current Title V permit. This report shall include the results of all monitoring, or a summary of all monitoring results, required by the Title V permit.</p>
Annual Discharge Monitoring Reports	<p>Monitoring results obtained during the previous month shall be summarized and reported on a WPDES Discharge Monitoring Report (DMR), #3200-28, postmarked no later than the 28<sup>th</sup> day of the month following the completed reporting period.</p> <p><i>[WPDES Permit #WI-0043583-5, Section D.(1)]</i></p>	<p>The Company shall report discharge monitoring results to WDNR as currently required under their WPDES permit, or, at the Company's discretion, in an annual report as described below.</p> <p>Annual Report Option: Monitoring results obtained during the previous calendar year shall be summarized and reported by the Company, postmarked no later than January 28 of the year following the reporting period. The annual report shall include the following information, at a minimum, for each calendar month:</p> <ol style="list-style-type: none"> <li>1) The highest recorded value for each parameter monitored;</li> <li>2) The lowest recorded value for each parameter monitored;</li> <li>3) The monthly mean value for each parameter monitored;</li> <li>4) The total pounds discharged for each parameter subject to a fee; and,</li> <li>5) A list of any exceedances of permit limits and the resulting corrective actions taken.</li> </ol> <p>This change in reporting frequency does not in any way modify the existing monitoring or recordkeeping requirements. The annual report shall also include any other information related to discharge monitoring data required in the WPDES permit.</p>
Wastewater Noncompliance Notification	<p>A written report describing any reported noncompliance shall be submitted to the Department's regional office within 5 days after the permittee becoming aware of the noncompliance. <i>[WPDES</i></p>	<p>The Company shall take immediate corrective action to address any upset condition or exceedance and shall notify WDNR within 24 hours of becoming aware of a wastewater exceedance. A report describing any reported noncompliance shall</p>

	<i>Permit #WI-0043583-5, Section D.(9)(b)]</i>	be submitted <u>by electronic mail</u> to the Department's regional office within 5 days after the permittee becoming aware of the noncompliance.
Stormwater Permit Classification	The Company holds a "Tier 2" general permit regulating storm water associated with industrial activity. <i>[WPDES Permit #WI-S067857-1]</i>	The Company's existing storm water permit shall be revoked and replaced by WDNR with a less stringent "Tier 3" general permit no later than October 1, 2000. All existing Tier 2 permit requirements shall remain in place until the effective date of the Tier 3 permit. Replacement of the Tier 2 permit with a Tier 3 permit recognizes WDNR's determination that the stormwater drainage from plant areas with a potential for significant material exposure is already routed to the plant's wastewater treatment facility.
Electronic Reporting	No existing requirements are superseded.	WDNR and the Company shall form a work group to discuss electronic reporting of environmental regulatory data, including but not limited to wastewater discharge monitoring data. The work group shall strive to identify obstacles, develop solutions to overcome the obstacles, and secure funding to implement the solutions. WDNR shall invite other regulated entities from Wisconsin to participate in this work group. The work group shall meet for the first time by December 1, 2000 and shall produce a written report on findings no later than June 30, 2001.
Annual Evaluation	No existing requirements are superseded.	The Company may evaluate all environmental monitoring, documentation and reporting requirements on an annual basis and submit any suggested changes to WDNR. If the suggested changes are not currently allowed under this agreement, WDNR shall review and consider such changes as potential amendments to this agreement.

### C. Permit Streamlining

The agreement allows the Company to streamline the permitting and approval process as follows in order to allow faster realization of environmental and energy efficiency improvements at the Pleasant Prairie Power Plant:

Item	Standard Requirements Replaced by this Agreement	New Requirements
Permit Waiver for Minor Physical or Operational Changes and Pre-Construction Notification	State-Only Permit Requirements and Application Procedures for Minor Sources/Minor Modifications	<p>A. <u>Waiver Requests</u></p> <p>The Company may request a waiver (exemption) to make minor physical or operational changes at the plant without revising this agreement or obtaining or modifying any air permit. To do so, the Company shall submit a written pre-construction notification to WDNR including the following information, at a minimum:</p> <ol style="list-style-type: none"> <li>1) A description of the proposed changes, including the purpose and schedule;</li> <li>2) A summary of the expected effect of the changes on potential and actual air emissions;</li> <li>3) A summary of ambient air quality modeling results for the proposed changes;</li> <li>4) A certification by a responsible official of the Company that the changes will not trigger any new applicable requirements and will not cause or contribute to a violation of any standard, emission limit, or control requirement embodied in federal law, federal regulations, chs. NR 400-499, Wis. Stats., or in any permit issued to the Company; and,</li> <li>5) An explanation of how WDNR may obtain more detailed documentation of all appropriate technology reviews and analyses, and design information, if necessary.</li> </ol> <p>The Company is not required to request a waiver or provide notification for changes already allowed under the general and specific exemption sections of chs. NR 406 and NR 407, Wis. Adm. Code.</p> <p>B. <u>WDNR Review</u></p> <p>WDNR shall approve or deny each Permit Waiver request in writing within 15 calendar days after receipt of the pre-construction notification. This period may be extended an additional 15 days by WDNR with agreement by the Company.</p>

		<p>WDNR shall approve a Permit Waiver request if the changes proposed by the Company meet <u>all</u> of the following conditions:</p> <ol style="list-style-type: none"> <li>1) The purpose of the project is to make process or energy efficiency improvements at Pleasant Prairie Power Plant;</li> <li>2) The changes will not constitute new major sources or major modifications to a major source (i.e., are not subject to ch. NR 405 or ch. NR 408, Wis. Adm. Code);</li> <li>3) The changes will not trigger a new applicable requirement; and,</li> <li>4) The changes will not cause or contribute to a violation of any standard, emission limit, or control requirements embodied in federal law, federal regulations, chs. NR 400-499, Wis. Stats., or any permit issued to the Company.</li> </ol> <p>If WDNR fails to act within the prescribed periods of time, the Permit Waiver shall be automatically approved.</p> <p>In the event the Company is granted a revised applicability test for New Source Review and/or Prevention of Significant Deterioration rules within a Project XL agreement with EPA and WDNR, condition 2 above shall not limit the right of the Company to make operational or physical changes at Pleasant Prairie Power Plant.</p> <p><u>C. Documentation</u></p> <p>For each permit waiver request, the Company shall maintain documentation of all appropriate technology reviews and analyses, and design information. This information shall be made available to WDNR on demand.</p> <p>The Company shall maintain documentation of all process improvements for which a permit waiver is ultimately obtained and shall report such changes in its annual report. Additionally, the Company shall provide a summary of all such process changes to</p>
--	--	--

		WDNR at the end of the agreement such that these changes can be embodied in any subsequent permit(s) that replaces the agreement.
Testing or Research of New Technologies	<p>Equipment used or to be used for the purpose of testing or research may be eligible for an exemption from construction permit requirements in ch. NR 406, Wis. Adm. Code, provided both of the following conditions are met:</p> <ol style="list-style-type: none"> <li>1) The Company submits a complete application for exemption that describes the proposed testing or research and includes an operating schedule and the types and quantities of emissions anticipated.</li> <li>2) WDNR determines that the equipment to be used and the anticipated emissions from the testing or research will not present a significant hazard to public health, safety, or welfare or to the environment.</li> </ol> <p>WDNR shall approve or deny an application in writing within 45 days of receiving a complete application for exemption.</p>	<p>The Company may conduct testing or research of new technologies without obtaining a <u>minor</u> source construction exemption under ch. NR 406, Wis. Adm. Code, if all of the following conditions are met:</p> <ol style="list-style-type: none"> <li>1) The Company (or its consultants) conducts a thorough engineering analysis and determines that the equipment to be used and the anticipated emissions from the testing or research will not present a significant hazard to public health, safety, or welfare or to the environment;</li> <li>2) The Company provides written notification to WDNR and members of the interested persons group at least 30 days prior to commencing research or testing that describes the proposed testing or research and includes an operating schedule and the types and quantities of emissions anticipated;</li> <li>3) The Company responds in writing to any substantive comments received from a member of the interested persons group prior to commencing research or testing; and,</li> <li>4) WDNR does not object in writing within 21 days of receiving notification.</li> </ol> <p>The Company shall remain responsible for the performance of any new technologies and for compliance with all applicable emission limits and control requirements, including those in the Title V permit. In addition, the Company shall maintain documentation of all appropriate technology reviews and analyses, design, construction, and operational information, making it available for examination by WDNR upon request. The Company shall describe the environmental and energy efficiency benefits of any technology tested or researched in its annual report to WDNR.</p>



Compliance Assurance Monitoring	No existing requirements are superseded.	WDNR shall provide the Company the opportunity to formally examine and compare the EMS and EMIS programs at the facility with EPA's compliance assurance monitoring (CAM) program. The results of this evaluation may result in modifying the agreement to address CAM.
---------------------------------	--	---

#### **D. Coal Combustion Waste Materials Utilization**

This agreement allows the Company to recover and beneficially reuse stored coal combustion waste materials, consisting of coal-fired power plant bottom ash and fly ash, power plant wastewater treatment sludge, and other minor coal-plant related materials. Recovery of such materials would normally require a plan modification consistent with ch. NR 514, Wis. Adm. Code, for each landfill covered under the agreement. Beneficial reuse of the recovered materials would normally be allowed under ch. NR 538, Wis. Adm. Code, if the materials meet specified criteria. Ch. NR 538, Wis. Adm. Code, is intended to be a self-implementing program but often requires project-specific review and approval from WDNR. Finally, under existing regulations in ch. NR 406, Wis. Adm. Code, the Company could be allowed to burn a coal and coal ash mixture as an alternate fuel without obtaining a new source permit upon approval by WDNR.

The table below summarizes all requirements that the Company shall meet in lieu of ch. NR 514 plan modification approvals, ch. NR 538 beneficial reuse approvals, and ch. NR 406 alternate fuel approvals. Any other potentially applicable requirements associated with coal combustion waste material utilization (for example, air pollution emission limits and control requirements, or stormwater pollution prevention requirements) are not waived.

Item	Standard Requirements Replaced by this Agreement	New Requirements
Recovery of Stored Coal Combustion Materials	NR 514 Plan Modification Requirements	<ol style="list-style-type: none"> <li>1) At least 30 days prior to beginning recovery of stored coal combustion materials under the terms of this agreement, the Company shall submit to the WDNR waste management program a generic plan modification request describing: <ol style="list-style-type: none"> <li>a) The proposed methods for removal, transportation, and storage of recovered materials;</li> <li>b) The proposed methods for landfill closure and monitoring;</li> <li>c) The planned ultimate fate of each landfill;</li> <li>d) How the performance standards in s. NR 504.04, Wis. Adm. Code, shall be met; and,</li> <li>e) The proposed sampling frequencies and other relevant</li> </ol> </li> </ol>

		<p>details of the analyses in requirement 6 below.</p> <ol style="list-style-type: none"> <li>2) The Company shall continue to comply with all conditions of existing plan approvals that are not replaced by the generic plan modification.</li> <li>3) The Company may recover coal combustion materials for beneficial reuse in accordance with the generic plan submitted under requirement 1 above unless WDNR requests modifications to the plan in writing within 30 days. The Company shall also comply with applicable fugitive dust and stormwater regulations when recovering materials.</li> <li>4) The Company shall audit the environmental management system of any business contracted to recover stored combustion materials from any landfill covered under this agreement prior to the commencement of recovery.</li> <li>5) The Company shall notify WDNR at least 30 days prior to initiating materials recovery at any landfill covered under this agreement. The notification shall include information relating to any modifications to the generic plan submitted in item 1 that would cover special conditions encountered at each landfill, as well as the expected schedule for all recovery activities at that location.</li> <li>6) The Company shall conduct baseline analyses of the material recovered from each landfill, including the energy, sulfur and moisture content.</li> <li>7) For each landfill, the Company shall submit a formal NR 500 plan modification within 180 days of completing materials recovery. The plan modification shall address closure, monitoring, and ultimate fate of the property.</li> </ol>
Beneficial Reuse of	NR 538 Beneficial Reuse	The Company may crush and screen coal

Stored Coal Combustion Materials as Sand/Gravel Substitutes	Approvals	combustion materials recovered from Company landfills under the terms of this agreement and use or sell this material as a sand or gravel substitute. The Company shall comply with ch. NR 538, Wis. Adm. Code, as well as WDNR fugitive dust rules and stormwater rules, when crushing, screening, or transporting these materials.
Use of Recovered Coal Combustion Materials in Alternate Fuels at Pleasant Prairie Power Plant	NR 406 Alternate Fuel Approvals (to avoid permit modification).	The Company may blend coal combustion materials recovered from Company landfills under the terms of this agreement with pulverized coal. The Company may burn the mixture as an alternate fuel in Boiler B20 or Boiler B21 at Pleasant Prairie Power Plant without modifying this agreement or any existing permits, if no physical changes are made to the combustion units. <u>All applicable emission limits and control requirements for those boilers are unchanged and shall continue to apply.</u> The Company shall list all alternate fuels when applying for renewal of the operation permit for Pleasant Prairie Power Plant.
Beneficial Reuse of New Combustion Byproducts from Pleasant Prairie Power Plant	N/A: The existing NR 538 approvals for reusing Pleasant Prairie Power Plant ash are unchanged.	The Company may continue to beneficially reuse fly ash and bottom ash created by combustion processes at Pleasant Prairie Power Plant, pursuant to the terms of existing ch. NR 538 approvals.

## **XII. REPORTING OF VIOLATIONS.**

Any violations discovered as part of the baseline or annual environmental performance evaluation shall be disclosed to WDNR within 45 days of the completion of the evaluation. WDNR may not take any civil enforcement action on any such reported violations if they are corrected within 90 days of notification. This does not exempt the Company from the requirements for immediate notification contained in s. 292.11, Wis. Stats.

If a longer period of time is needed to correct the violations, a compliance schedule can be negotiated and the agreement modified allowing a compliance schedule of up to 12 months.

## **XIII. BASELINE, PERIODIC PERFORMANCE EVALUATIONS AND MEASUREMENT.**

Within 180 days of the signed agreement, the Company shall perform and submit to WDNR a baseline performance evaluation covering the plant's environmental performance. This evaluation shall be

repeated annually on the anniversary date of the baseline submittal or on another date mutually agreed to by WDNR and the Company. Results of the performance evaluations shall be shared with the interested persons group.

The Company shall provide an annual written performance report to WDNR, the interested persons group, and the public library nearest to Pleasant Prairie Power Plant that includes the following information:

**A. Regarding the Interested Persons Group:**

- Changes in the composition of the interested persons group;
- Summary of assistance and information provided to the interested persons group;
- Summary of meetings with the interested persons group, including dates, attendance lists, topics addressed, and comments received; and,
- Results of any actions or changes resulting from input and feedback from the interested persons group.

**B. Regarding Commitments to Superior Environmental Performance:**

- Tons of coal displaced by recovered ash and Megawatt-hours (MWh) of energy recovered from previously landfilled ash;
- Average annual opacity of the plants emissions and summary of any corrective actions taken through the year to address any opacity levels above the agreement commitment level;
- Volume of landfill space made available and number of landfills decommissioned or acres of land made available for higher use;
- Progress on the implementation and revision of the plant's environmental management system (EMS);
- Results of the initial or annual performance review conducted of the plant, including number of findings, corrective actions, and time periods required for corrective action;
- Progress on the implementation and revision of the plant's environmental management information system (EMIS);
- Progress on the conduct of supplier EMS audits, including list of audits performed, any performance improvements by the suppliers and consequent environmental or other benefits;
- Progress and results of mercury demonstration testing; and,
- Progress and results of continuous particulate matter monitor study.

**C. Regarding Operational Flexibility:**

- A list of any incidents when the daily average opacity exceeded 10 percent or the six minute average opacity exceeded 17 percent;
- Monthly and annual CEM monitor availability level;
- An annual excess emission summary;
- Semi-annual and annual monitoring reports and compliance certifications;
- Performance measures, including normalized air emissions per megawatt-hour (MWhr) energy produced;
- An annual discharge monitoring summary report;
- A list of all wastewater noncompliance notifications;
- Process changes made at the plant for environmental and energy efficiency purposes that received a Permit Waiver;

- Any construction relating to plant emission sources;
- New technologies tested or installed at the plant;
- A summary of environmental benefits and administrative savings to the Company and WDNR resulting from the acceleration of process improvements or technologies allowed under section XI.C. of this agreement, including any accelerated environmental improvements and the consequent reduction in overall emissions or potential impact to the environment;
- An annual summary of coal combustion byproduct utilization;
- Source of materials recovered;
- Weight or volume of materials used;
- Energy value of recovered materials;
- Chemical characteristics (per NR 538 Annual Tests Criteria);
- Weight of new marketable materials produced as a result of the recovery process;
- Calculated weight of virgin sand/gravel aggregates displaced by the recovery and sale of coarse materials (assuming a 1:1 replacement ratio);
- Detailed information for each landfill on the amounts of material removed, an indication of whether removal is completed or ongoing, and an assessment of the removal process (and closure, if applicable); and,
- Any progress relating to the environmental benefits or redevelopment of the monofill facilities from which the material is recovered.

**D. Regarding Overall Success of the Agreement:**

- Measurement of the opinions of the Company's employees and the public regarding participation in this agreement;
- An itemized summary of estimated administrative cost savings resulting from this agreement both by the Company and WDNR during the previous year;
- Measurement of trust among the Company, WDNR, and the public; and,
- A summary of the annual achievements, difficulties or other challenges associated with fulfilling the agreement.

In addition, the Company shall host an annual summary meeting at the plant wherein WDNR and all interested persons are presented the above information.

The Company shall select the actual annual submittal date of the above information within 60 days after the effective date of this agreement.

**XIV. REOPENER.** At any time during the period of the agreement the Company may request to reopen the agreement for potential modifications to reflect changing business conditions, environmental performance goals, modification or inclusions of other provisions, or for other valid reasons as mutually agreed with WDNR. Any modifications to the agreement shall require the same approvals as did the original agreement.

**XV. APPLICABLE LAW.** The laws of the State of Wisconsin shall govern this agreement. Except as provided herein, the Company shall at all times comply with all Federal, State, and Local laws, ordinances and regulations in effect during the period of this agreement.

**XVI. ADDRESSES.** All correspondence and communication shall be directed to the appropriate contact person listed below. Changes in the information listed below shall be forwarded to the other party when effective and shall become part of this agreement without a formal amendment.

Wisconsin Department of Natural Resources  
Bureau of Cooperative Environmental Assistance  
PO Box 7921  
Madison, WI 53707-7921

Wisconsin Electric Power Company  
Pleasant Prairie Power Plant  
8000 95<sup>th</sup> Street  
Pleasant Prairie, WI 53158

IN WITNESS WHEREOF, the parties by their signatures shall cause this agreement to be executed on the date aforementioned.

Signed for and on behalf of:

STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES

Date: \_\_\_\_\_ By: \_\_\_\_\_

Title: \_\_\_\_\_

Signed for and on behalf of:

WISCONSIN ELECTRIC POWER COMPANY

Date: \_\_\_\_\_ By: \_\_\_\_\_

Title: \_\_\_\_\_